Run-6 Preparation & Run Plan

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Time and Scheduling Meeting

PHENIX about to be ready!

- Today's access:
  - BBC expected finally back in business after the Christmas shower
  - Other smaller issues related to Aerogel Detector, MPC cabling etc. being fixed
- Other than that, DAQ development work in full swing led by John Haggerty
- All subsystem experts are now at BNL, checking their respective subsystems for stability, operation and pedestals where necessary
- PHENIX 5 person regular shifts have begun today
- Data writing and archiving issues being fixed, tested, and improved
- PHENIX will be ready to take data middle/late this week
- All finer adjustments and improvement in efficiencies, final settings of the trigger thresholds etc. beyond that stage will need nights with continuous collisions

PHENIX run plan

- **4 weeks** of transverse radial scattering at 200 GeV CM for first exploration of ***Sivers effect using back-to-back di-pion*** correlations
  - ~5 pb^{-1} at 60% polarization, but 4 weeks a hard deadline
- **6.5-7 weeks** of long. Scattering at 200 GeV CM for consolidating the ***ΔG result from Run-5*** and **first** possible spin asymmetries from ***direct photon production***
  - Desired FOM improvement: $(P^4L)_{RUN6}$ ~ *at least* 4 $(P^4L)_{RUN5}$
  - Hard deadline of 7 weeks
- **2 weeks** of 62.4 GeV CM pp data for ***Au-Au/Cu-Cu comparison***, transversely polarized if possible
  - 0.6 pb^{-1} initially suggested, but now, will take any sample ~ 0.2 pb^{-1}
  - No polarization minimum
- **3 days** of 22 GeV CM pp data for ***comparison with SpS***
  - 4 nb^{-1}, no polarization requirements
- **1 week** of machine commissioning and studies at 500 GeV CM polarized transverse & longitudinal data
  - Background and trigger studies & local polarimetry at 250 GeV CM